



PHILIPPINE BOARD
OF ORTHODONTICS

**Guidelines for Phase IV Examination
(2011-2012)**

THE PHASE IV CLINICAL EXAMINATION MAY BE TAKEN WITHIN (SIX) YEARS OF SUCCESSFULLY PASSING THE PHASE II WRITTEN EXAMINATION OR WITHIN 6 YEARS OF PASSING PHASE III CLINICAL EXAMINATION.

I. The Oral Examination (OE)

The oral examination is an assessment of the candidate's diagnosis and treatment planning ability and knowledge of aspects of treatment related to the Board and Candidate Case Reports. It is divided into two sections:

A. The Board Case Record Oral examination (BCROE)

B. The Candidate Case Report Oral Examination (CCROE)

The candidate must satisfactorily complete both sections to pass the oral examination.

A. Board Case Record Oral Examination (BCROE)

On the day of the examination, candidates must be available in the BCROE study room one hour prior to their examination time to review two cases with complete records furnished by the Board. The candidate will bring his own protractor, rulers and pencils for the BCROE. Tracing sheets will be provided by the PBO. Following the review period, the candidate will be questioned by the examiners regarding the patient records furnished by the Board.

A candidate who performs unsatisfactorily on the BCROE will be requested to repeat this part of the oral examination.

B. The Candidate Case Report Oral Examination (CCROE)

This part of the oral examination (OE) is an assessment of the candidate's knowledge of aspects of treatment related to the case reports presented by the candidate. A candidate who performs unsatisfactorily with five (5) out of the ten (10) cases of the CCROE will be required to retake the Phase IV. Those who fail in one(1) to four (4) of the ten (10) cases will be requested to return with the same number of cases with their corresponding classification within a specified time period deemed necessary by the board.

II. Candidate Case Report Examination (CCRE)

The candidate case report examination (CCRE) is a comprehensive evaluation of the case reports of patients that have been treated by the candidates. The following are the requirements of the CCRE:

1. The categories of the malocclusions presented must comply with the case record category specifications as required by the Board and stated herein.
2. The candidate must have personally made the diagnosis, the comprehensive treatment plan, installed the appliance, monitored the progress and regular adjustments, and completed the treatment.
3. The chosen clinical cases included in the CCRE must be representative of the most challenging patient care rendered in the candidate's practice and must demonstrate the candidate's diagnostic ability, treatment skills, and clinical judgment, as well as, reflect excellence in finishing.
4. Treatment records of patients treated at an educational institution cannot be used to satisfy the Phase III clinical examination requirements.
5. Candidates with academic appointments may not use clinical case reports from their department as part of their exhibit.
6. All registrants, including those in partnerships, associateships, and multiple office practices or group practices must submit an affidavit to the PBO affirming that all of the professional judgement and treatment was provided by the candidate for each of the patient records displayed.

RECOMMENDED TREATMENT OBJECTIVES:

Evaluation of the orthodontic treatment results presented in the CCRE exhibit will be based on the attainment of the following orthodontic treatment objectives:

1. Treatment complementary to facial growth
2. Facial Harmony – balance and harmony of the soft tissue and proper proportion of the facial structures
3. Maximum esthetics of the teeth and face
4. Dental health- maximum health of the teeth, the supporting tissues and the adjacent structures or in compromised cases, treatment rendered must give the best possible outcome for particular case
5. Optimal function, free of interferences and trauma
6. Excellent occlusion
7. Favorable intercuspation of the teeth
8. Alignment of permanent second molars
9. Proper management of third molars
10. Favorable overjet and overbite relationship
11. Favorable correction of rotations of all teeth
12. Favorable axial inclination of all teeth
13. Complete space closure
14. Coordinated ideal arch form with all the teeth aligned within their supporting structures
15. Good vertical control
16. Good stability

NOTE:

The result of the Phase IV examination will either be *pass*, *incomplete* or *fail* . Unsuccessful candidates must follow the Board's specific instructions for re-examination . They are given three chances to complete Phase IV within a five year period. Otherwise, he/she will have to reapply for the Phase II or III examination, whichever preceded the Phase IV examination.

Upon successful completion of the Phase IV examination, the candidate will be awarded the title **DPBO** (Diplomate of the Philippine Board of Orthodontics).

Case Requirements for Phase IV Examination

The Case Report Examination component requires ten (10) cases:

The ten (10) case presentation must contain any of the following:

1. *one case treated with four (4) quadrant extractions that demonstrates effective space closure (identified as "Extraction Case")*
2. *one case with bilateral end-to-end or greater Class II molar relationship present at the time of appliance placement. A unilateral full-step Class II molar relationship is also acceptable. This case may have been treated with or without extractions. The final treatment result should exhibit a Class I or full step Class II molar and Class I canine relationship (identified as "Class II Case").*
3. *one case with bilateral or unilateral Class III molar relationship (at least 2 mm. Class III) treated with or without extractions.. The final treatment result should exhibit a Class I molar and canine relationship (identified as "Class III Case").*
4. *one case involving both Phase I and Phase II , with growth modification or early treatment. Case must include records from pre-Phase I with complete interim(progress) records and complete Phase II records (identified as Early Treatment Case)*
5. *One case with moderate to severe crowding (6 mm per arch or greater) treated without bicuspid or molar (except 3rd) extractions and finished with ideal overjet and overbite and Class I molar and canine relationship (identified as "non-extraction case)*
6. *One case with an anterior or posterior open bite of 2 mm or greater treated either with or without extractions (identified as an "open bite case)*
7. *One case with complete anterior crossbite of at least 2 mm negative overjet or greater or with unilateral or bilateral complete posterior crossbite (identified as "crossbite case")*
8. *One complicated case involving multidisciplinary work such as: (identified as a "Complicated Case")*
 - *Orthognathic Surgery case*

- *Molar uprighting with prosthodontic work*
 - *Use of TAD (temporary anchorage device) or MIA (mini implant anchorage); evidence of use in the form of photographs and/or study models must be shown*
 - *Missing teeth restored with implant placement or prosthodontic work*
 - *Multiple (at least two or more) missing teeth requiring prosthodontic rehabilitation*
 - *Impacted tooth (except third molar) with surgical exposure*
 - *Transposed teeth*
 - *Periodontally involved teeth treated in conjunction with periodontal treatment*
9. *Any case with a discrepancy index of twenty (20) or greater (Discrepancy Index to be provided by PBO)*
10. *As many cases with a discrepancy index of 20 or greater*
11. *Two (2) to three(3) cases with a discrepancy index between 15 -19*

NOTE: Repetition of each case type is not allowed.

OR

Six (6) cases with the following requirements:

1. *Three (3) cases with a Discrepancy index of 20 or greater*
2. *Three (3) cases with a Discrepancy index of 10 or greater*

The six (6) case presentation must contain any of the following:

12. *one case treated with four (4) quadrant extractions that demonstrates effective space closure (identified as "Extraction Case")*
13. *one case with bilateral end-to-end or greater Class II molar relationship present at the time of appliance placement. A*

unilateral full-step Class II molar relationship is also acceptable. This case may have been treated with or without extractions. The final treatment result should exhibit a Class I or full step Class II molar and Class I canine relationship (identified as "Class II Case").

14. *one case with bilateral or unilateral Class III molar relationship (at least 2 mm. Class III) treated with or without extractions.. The final treatment result should exhibit a Class I molar and canine relationship (identified as "Class III Case").*
15. *one case involving both Phase I and Phase II , with growth modification or early treatment. Case must include records from pre-Phase I with complete interim(progress) records and complete Phase II records (identified as Early Treatment Case)*
16. *One case with moderate to severe crowding (6 mm per arch or greater) treated without bicuspid or molar (except 3rd) extractions and finished with ideal overjet and overbite and Class I molar and canine relationship (identified as "non-extraction case)*
17. *One case with an anterior or posterior open bite of 2 mm or greater treated either with or without extractions (identified as an "open bite case)*
18. *One case with complete anterior crossbite of at least 2 mm negative overjet or greater or with unilateral or bilateral complete posterior crossbite (identified as "crossbite case")*
19. *One complicated case involving multidisciplinary work such as: (identified as a "Complicated Case")*
 - *Orthognathic Surgery case*
 - *Molar uprighting with prosthodontic work*
 - *Use of TAD (temporary anchorage device) or MIA(mini implant anchorage); evidence of use in the form of photographs and/or study models must be shown*
 - *Missing teeth restored with implant placement or prosthodontic work*

- *Multiple (at least two or more) missing teeth requiring prosthodontic rehabilitation*
- *Impacted tooth (except third molar) with surgical exposure*
- *Transposed teeth*
- *Periodontally involved teeth treated in conjunction with periodontal treatment*

NOTE: Repetition of each case type is not allowed.

Case Report Display for Phase IV Examination

It is mandatory that a copy of a synopsis of the candidate's case reports be provided with the case report display. The synopsis must include the patient's name, category of malocclusion, treatment summary, plus patient's ages and dates when all records were taken. Adhere to the example that follows:

Synopsis of Case Reports

Candidate's Name: _____

Name & Category	Treatment Summary	Age & Date of Pre-tx Records	Age & Date of Progress Records	Age & Date of Post-tx Records
Norma Lopez Early tx. Mixed Dentition	Crossbite Non-ext. CI II Div 1	10.9 yo 9-22-71	11.3 yo 3-22-72	13.6 yo 6-7-74
Juan Santos Class I with a deep overbite	Non-ext	13.11 yo 12-16-72		16.2 yo 5-8-74

Raul Reyes Class II Div. 2	Non-ext.	11.1yo 9-6-73		13.6 yo 2-10-76
Andrea Santos Class II Div 2 High Angle	Ext. max. 4's & mand. 5's	9.2 yo 9-7-68		13.8 yo 3-2-73
Jose Estrada Severe skeletal Class II	Non-ext. Maxillo-mand. Orthognatic surg.	23.9 yo 4-22-72	24.9 yo 5-22-72	25.7 yo 2-15-74

*Progress records are only required for 2 stage treatment or orthognathic surgical cases. However, the candidate is welcome to present additional progress records for certain cases if he/she deems them fit.

The Case Report

The recommended case report format is provided by PBO upon application for Phase III and IV examinations. Candidates must limit their written summaries to the space provided

1. Title page
2. Resume
3. Cephalometric summary
4. History and etiology
5. Diagnosis-include a brief description of the nature and extent of the anomalies, use a specific problem list.Divide into anteroposterior (AP), Vertical and Transverse
6. Specific objectives of treatment for:
 - a. maxilla
 - b. mandible
 - c. maxillary dentition
 - d. mandibular dentition
 - e. soft tissue (face, gingiva)
7. Treatment Plan/ Mechanotherapy

- a. include your diagnostic analysis and your reason for choosing a particular treatment plan, extraction or non-extraction, appliances used, anchorage considerations, type of retention, supplemental therapy, prognosis.
 - b. Mechanotherapy– include a step by step detailed plan of the actual treatment (If pertinent, you may describe response to treatment, and any complications.) Do not record what was done at each appointment from your treatment chart.
8. Results achieved - refer to the objectives stated for the maxilla, mandible, maxillary dentition, etc., and confirm that the objectives were reached or explain why an objective was not realized.
 9. Retention - describe appliances and supplementary procedures.
 10. Final Evaluation – include all pertinent observations and prognosis for stability. Describe post-treatment changes and possible problems in the future. State what you learned about your specific diagnosis and treatment and what you would do differently if given the chance to do so.

Complete Orthodontic Records

The objective of making quality records for the purpose of establishing a sound diagnosis is very important. The following records are required to be presented in the Candidate Case Report Examination (CCRE).

1. Orthodontic Study Models
2. Panoramic Radiograph
3. Lateral Cephalometric radiograph
4. Cephalometric tracings
5. Facial / Extra-oral photographs
6. Intra-oral color photographs

All pre-treatment, progress and post-treatment records must be complete and must have all six mentioned above.

Pretreatment Records

Pre-treatment records must be made prior to appliance placement and not earlier than 6-8 months prior to start of treatment.

Progress Records

Progress Records are mandatory for two stage malocclusion correction eg. early treatment and orthognathic surgery cases.

Post-treatment Records

Post-treatment records must be made at the time of appliance removal or with in one year of that date. Second molars must be in occlusion. Radiographs taken within the three months of completion of treatment may be substituted for the final radiographs.

Case Report Instructions COMPLETE ORTHODONTICS RECORDS MUST INCLUDE THE FOLLOWING:

Note: The candidate is reminded that all records are legal documents and must not be altered.

Orthodontic Study Models

All models should be prepared using white orthodontic dental stone.

Impressions should extend far enough into the sulcus to allow accurate reproduction of all soft tissue anatomy in the dental casts. The casts should be trimmed in maximum intercuspation or in the intercuspals position; bite registration is recommended.

Trimming or carving on the anatomical portion of the dental casts should be limited to the removal of bubbles and defects. Alteration of tooth anatomy is considered as records falsification. A lower lingual retainer, either bonded or banded, may be in place when post-treatment casts are made. After the casts are prepared, they should be smoothed and polished in such a manner that tooth and soft tissue detail is not destroyed. (Refer to appendix I for diagram of casts.)

Panoramic Radiographs

Panoramic radiographs must be of diagnostic quality. The films must be oriented correctly with right and left sides clearly marked. The patient's name and date should be visible. The radiographs should be placed in a transparent protective cover .

Lateral Cephalometric Radiographs

Cephalograms must show as much anatomy as possible, especially in vital landmark areas. They should be properly standardized, oriented, and processed. The soft tissue profile must be visible. The patient's name and date should be visible. The radiographs should be placed in the transparent protective cover.

- A. Pre-treatment tracings must be in green
- B. Post-treatment tracings must be in red
- C. Progress tracings must be in blue

Cephalograms must be manually and accurately traced by the candidate with a small diameter tracing pencil or pen. Computer generated tracings are not acceptable. Templates may be used to trace the tooth outlines. Anatomical structures should be identified accurately in preparation for the marking of landmarks and the drawing reference lines. All measurements must be recorded on the cephalometric summary sheet. The soft tissue outline of the facial profile is required for each tracing. Tracings should be enclosed in transparent plastic protectors, without backing, for superimposition by the examiners.

Candidates may use whatever landmarks, lines and measurements they wish, provided they follow the given PBO cephalometric standards

attached. The areas of study listed on the *cephalometric summary sheet* (to be provided) must be evident on the cephalometric tracing and must be recorded. The candidate must be thoroughly familiar with all aspects of the cephalometric radiographs, tracings, and measurements, including the meanings as applicable to each specific case.

PRE and POST TREATMENT ANALYSIS:

A minimum of three composite tracings are required: craniofacial, maxillary, and mandibular. The three composites should be manually traced by the candidate with a small diameter pencil or pen. Separate composites of pre-treatment and post-treatment pre-treatment and progress, progress and post-treatment tracings are required in the case reports with progress records.

The following procedure for composite tracings is required:

- a. Craniofacial composite – register on the sella with the best fit on the anterior cranial base bony structures (Planum Sphenoidum, cribriform plate, greater wing of the sphenoid) to assess overall growth and treatment changes.
- b. Maxillary composite - register on the lingual curvature of the palate and the best fit on the maxillary bony structures to assess maxillary tooth movement.
- c. Mandibular composite - register on the internal cortical outline of the symphysis with the best fit on the mandibular canal to assess mandibular tooth movement and incremental growth of the mandible.

Candidates must use the same colors for the composite tracings that are used for the cephalometric tracings. Tracings must be enclosed in transparent plastic protectors provided in the examination kit. (Please refer to appendix II for a sample of the composite tracing).

Note: The Frankfort Horizontal (FH) line that is drawn on the original pretreatment tracing should be transferred to the progress and post-treatment tracings. By not drawing porion and orbitale on the progress and post-treatment tracings, one will be reminded to superimpose on the

cranial base and transfer the original Frankfort Horizontal. This will help to reduce tracing and measurement error.

PHOTOGRAPHS

Both extra-oral and intraoral photographs must be mounted on an 8" x 11" cardboard and inserted into a plastic sheet protector.

Extra-oral / Facial Photographs

Facial photographs are required for the pre-treatment, progress, post-treatment records. Photographs should be approximately one-quarter life size.

Requirements:

1. Quality standardized facial photographic prints in color.
2. Patient's head oriented accurately in all three planes of space and on Frankfort Horizontal.
3. Right and left profile photographs with lips at rest or lightly touching
4. Two anterior views – one with lips relaxed and one smiling.
5. The photographic method used in the pre-treatment records should be repeated in the progress, and post-treatment records. Soft tissue areas of concern and of diagnostic value should be recorded in these facial photographs.
6. Background free of distractions.
7. Quality lighting revealing facial contours, with no shadows in the background.
8. Ears exposed for purpose of orientation
9. Eyes open and looking straight ahead. Glasses removed.

Intraoral Photographs

Intraoral photographs are required for pre-treatment, progress and posttreatment records. If mirror images are used, print them in reverse and

mount them as you are looking at the patient. Photographs should be as close to a 1:1 relationship as possible.

Requirements:

1. Quality, standardized intraoral prints in color.
2. Patient's occlusal plane parallel with the top and bottom of the mount.
3. One frontal view in maximum intercuspation
4. Two lateral views (right and left) in maximum intercuspation including the first molars at the very least (up to 2nd molars if possible)
5. Two occlusal views (maxillary and mandibular)
6. Free of distractions (cheek retractors, labels and fingers)
7. Lighting should reveal anatomical contours with minimal shadows.
8. Use of two cheek retractors.
9. Free of saliva and/or bubbles
10. Clean dentition

Identification of Records

Each item in the case report must be clearly marked with ALL of the following:

1. Candidate's Name
2. Case Report Number
3. Date of Record
4. Patient's age to the nearest month (example: 12.3 yo for 12 yrs. 3 months)
5. Stage of treatment- identified by colored round stickers consistent for all cases to signify the different stages of treatment:
 - a. Pre-treatment : green
 - b. Progress (for Phase I & II or surgical treatment) : red
 - c. Post-treatment : blue
6. Stickers' position:
 - a. Casts- placed on center of the top and bottom of the base
 - b. x-rays- placed on the upper right hand corner
 - c. photographs- placed on the upper right hand corner of the mount

****PORTIONS OF THIS DOCUMENT HAVE BEEN ADAPTED FROM THE SUGGESTED GUIDELINES OF THE World Federation of Orthodontists (WFO) AND THE AMERICAN BOARD OF ORTHODONTICS(ABO) FOR THE PURPOSE OF HAVING GLOBAL STANDARDS WITH REGARDS TO DIPLOMATE CERTIFICATION.**

****PERMISSION FROM THE AMERICAN BOARD OF ORTHODONTICS (ABO) HAS BEEN OBTAINED TO USE THEIR DISCREPANCY INDEX (DI) FORM.**